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Famous and Historical Trees of Iowa



Iowa Department of Natural Resources
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Welcome

Dear Friends,

I would like to take the opportunity to welcome you to *Famous & Historic Trees of Iowa*. As a way of celebrating Iowa's Sesquicentennial, this publication will take a look at the role trees and woodlands played in the development of our state's history.

If the trees captured in the following pages could talk, they would tell wonderful stories of historic significance before and during the settlement of Iowa by our ancestors. During the first days of statehood, early pioneers determined where they would settle their communities based on the location of trees. Early Iowans depended on trees as a source of fuel, building materials and protection from the ever-changing weather. University of Iowa professor Cornelia F. Mutel provides an excellent look at the role trees played in Iowa's history and settlement. Sincerest thanks are extended to her for participation in this project.

The Forestry Division of the Department of Natural Resources feels it is important to document the role of trees and woodlands in the history of Iowa. *Famous and Historical Trees of Iowa* identifies individual and groups of trees that have historical significance to the settlement of our state. A committee was established to set criteria for trees included in the publication. Committee members include: Jerome Thompson, State Historical Society; Hans Brosig, Jasper County Museum; David Countryman, Iowa State University; Gene Hertel, Retired State Forester of Iowa; Lowell Washburn, Iowa Department of Natural Resources; and myself. Five categories were established by the committee: 1) Trees associated with events or trends that were significant to Iowa's history. 2) Trees associated with the lives of individuals significant to Iowa's history. 3) Trees notable due to their location. 4) Trees notable for their unusual shape or form and 5) Trees notable for other reasons.

Nominations were solicited from County Historical Societies, County Conservation Boards and individuals. The nominations were reviewed by the committee and 26 trees or groups of trees were selected to be included in this publication. Also included is a listing of Iowa's present and former National "Big Tree" Champions.

Special thanks is extended to all of the people who contributed to *Famous and Historic Trees of Iowa*, your generosity and dedication to this project was outstanding.

I hope you enjoy *Famous and Historic Trees of Iowa*. The trees of our state are a window to the past and a valuable resource for our future.

Sincerely,



William A. Farris
State Forester
Forestry Division
Iowa Department of Natural Resources



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The Historic Role of Iowa's Trees

by Cornelia F. Mutel

Iowa Institute of Hydraulic Research
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The year was 1833. The Black Hawk Purchase, a strip of land along the western edge of the Mississippi River, had just been opened to settlement. Newcomers arrived first in a trickle, then in a steadily widening stream, all flowing in from the east to seek land and prosperity in what, 13 years later, would become a part of Iowa.

We can only guess what the settlers must have felt when they first witnessed the forests carpeting the great river's floodplain, fingering their way inland along the streams and creeping uphill as fire-prone open woodlands and savannas. The pragmatic doubtless thought they were a nuisance, a source of backbreaking labor, an obstacle to be overcome before the earth could yield its bounty to human mouths. Others may have approached them as a challenge, a tangle of wilderness to be conquered and transformed into something more orderly, familiar, and manageable. Many retreated to the trees for shelter from the ceaseless winds, scorching sunshine, and violent storms of the interspersed exposed prairies. Some settlers must have feared the woodlands, imagining hostile Indians, dangerous animals, insects, and fevers lurking in their shadows; seeing them as the source of "vegetable deposits of ages... which, with the thousands

of fallen and rotting trees, fill the air with noxious exhalations, producing diseases of the most malignant character." (*Parker, p 34*) A few surely focussed on their beauty and natural wealth, for early immigrants described Iowa's forests as exceedingly fine, with black walnuts four to six feet in diameter, sycamores five feet wide, and miles of oaks with a breadth of three to four feet, within which roosted the now-extinct passenger pigeon packed so tightly that the birds' combined weight broke branches the size of small trees.

But regardless of emotional approach, the settlers sought the woodlands as a source of livelihood, for they brought to this new land a memory of lives and a culture based on wood and the use of forests. For 200 years, settlers before them had carved America's eastern forests into home and safety: lumber for housing and tools, logs for cooking and heat. "Witness trees" marked the location of their land claims, and fenceposts provided a strong dividing line between their efforts and the stark wilderness beyond. Forests provided wild fruits for the gathering, bark for tannin to tan their hides, dyes and honey, maple sap for syrup. Woodlands held the game they hunted and the medicinal herbs they used to cure their ills. Timberland, they knew, was a necessity, almost as precious as the soil that grew their food.

And because timber was an essential raw material, Iowa's first settlers sought the woodlands and settled only there. "Treeless prairies are not fit for human habitation," expounded one advocate of protective shelterbelts in the early 1870s. "More people were frozen to death this year in northern Minnesota than have been murdered by the Indians since settlement." (*Widner, p 381*)

The settlers found woodlands mostly in the moister, milder climates of eastern Iowa, with larger timber stands especially in northeastern and southern Iowa. Oak and hickory, maple and basswood, ash, walnut, elm and cottonwood, Iowa's rich de-



Forest Cover in Iowa in 1850 (Thomson & Hertel, 1981).

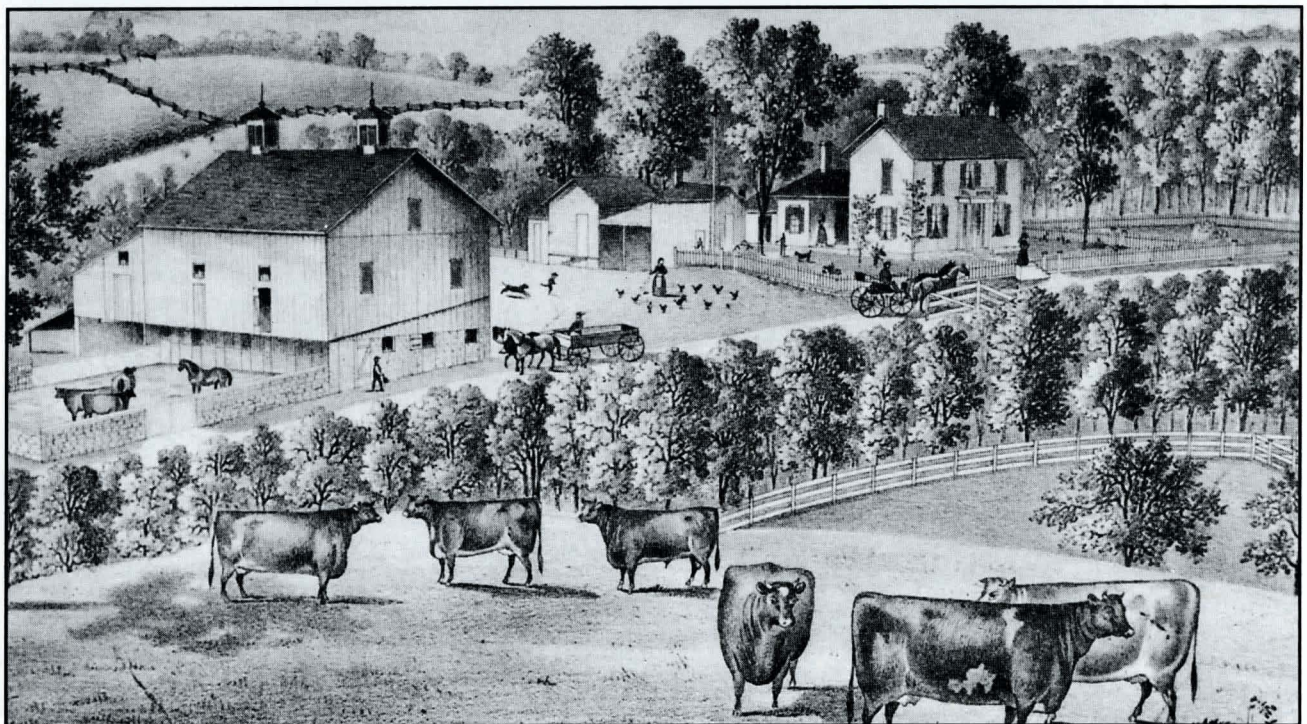
ciduous woods formed the western terminus of the forests that spanned the eastern United States. Still farther west, the climate became ever drier and more taxing to the moisture-requiring trees, which thus clung to the wet-soiled water courses in ever-narrowing ribbons. Only about 18% of Iowa, 6.7 of the state's 36 million acres, had some form of tree cover in 1850s. The rest lay coated by the thick roots of prairie grasses that loved both the sun's scorching heat and the fires that roared like a locomotive across the grasslands, thwarting any errant attempts at tree invasion. These fires in places crept into woodlands, thinning them and creating savannas: flower-dappled grasslands spotted by broad-crowned bur or white oaks. Savannas bordered denser woodlands and straddled ridges.

At first shunning the prairies, the settlers paid high prices for wooded land, sometimes as much as a hundred dollars an acre, many times the U.S. government's first offering of land at \$1.25 an acre. Prairie in contrast could be had for the asking. While the future Iowa was gridded out and distributed in the normal checkerboard of squares and rectangles, timber along rivers was parcelled into hundreds of small narrow woodlots. For decades to come, these woodlots would be guarded

and visited regularly by farmers who were tied to them by need, although in later years their farmsteads might be some distance from the timber. During the first few decades of settlement, Iowa's farmsteads fingered their way westward along the timbered streams and woodland edges.

The very first settlers hewed virtually everything they owned with the few woodworking tools they had brought along: the axe, broadaxe, plane, auger, and frow. With these tools, and with their knowledge of trees and woodworking skills, they shaped logs into the familiar symbols of pioneer life, the log cabin and rail fence.

However, in Iowa, this log cabin stage did not last long. The streams that watered woodlands also could provide energy, and water-powered sawmills followed settlements so closely - sometimes even preceding them - that the frame house soon became standard. With such sawmills, the settlers could meet most of their material needs with locally-produced rough lumber cut from local trees. Living thus on a local scale remained the pattern as long as the wagon served as the principal conveyance, until the days when rail transport permitted import of heavy, bulky wood products produced elsewhere.



Limestone Farm in Cedar County Iowa - 1875

Famous and Historical Trees of Iowa

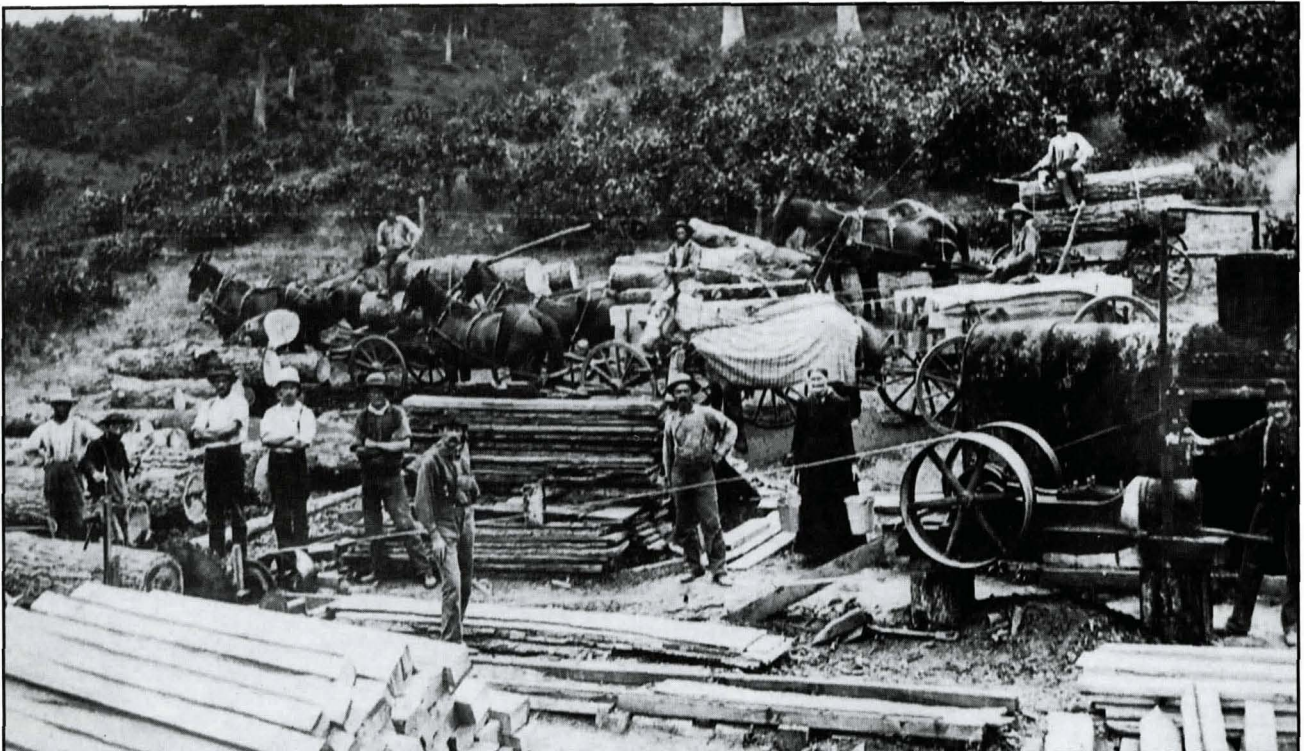
These local sawmills were small operations, often run by one or a few wintertime woodsmen who farmed when spring came. By 1860, over 500 small sawmills had invaded nearly all of the state's timbered sections and were found in about 70% of her counties, cutting within a few years the choicest of Iowa's trees.

The period before the Civil War has been called the Age of Wood, when intimate knowledge and appreciation of wood allowed its substitution for iron, stone, and leather. "Man walked on wood, slept in it, sat on wooden chairs at wooden tables, drank and ate the fruits of trees from wooden cups and dishes," the author Eric Sloane (p 72) has written. "From cradle of wood to coffin of wood, the life of man was encircled by it." Early settlers and the craftsmen who accompanied them appreciated the shades of difference among tree species. Furniture makers might fashion a rocking chair out of 10 to 15 tree species, being sure to carve the rockers from black walnut because it would not creep forward on slick floors. Hard smooth maple was selected for kitchen woodenware, tough hickory for wagon wheels. Barrels, indispensable for storage and shipping, were crafted by coopers who

chose white oak for those that were to hold liquids and red oak for flour and sugar. With skill and knowledge, forests were converted into products that eloquently addressed the settler's every need.

Although small sawmills were crucially important in Iowa during early settlement, these sawmills soon fell behind the local demand for lumber. Iowa's population was exploding, thousands of new settlers arriving each year. Farmsteads and towns were mushrooming overnight. The newcomers needed homes, and they yearned not only for the basic necessities, but also for the comforts and conveniences they had enjoyed back east. For both, they needed wood, and plenty of it. But already, Iowa's choice timber was largely cut. Where were the necessary sawlogs to be found?

In Wisconsin's northwoods, where a seemingly infinite supply of white pine and hemlock grew in profusion, and where great rivers, the Wisconsin, Black, St. Croix, and especially the Chippewa and her tributaries, flowed into the Mississippi, affording cheap transportation. Already in the early 1830s, rafts of white pine were drifting down the river to lodge in Iowa. By the late 1830s, lumber rafts were arriving regularly, setting the stage for



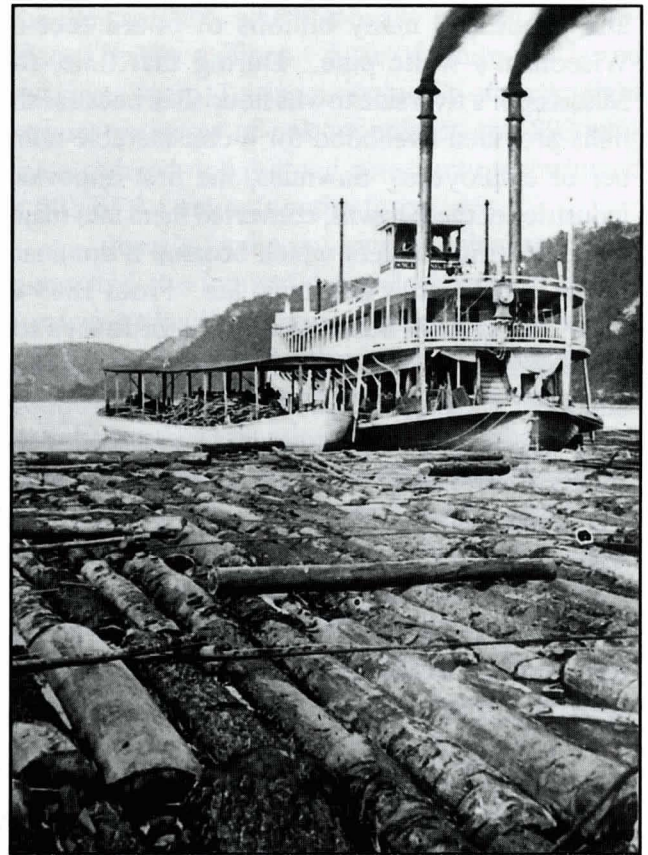
W.J. Young's Sawmill, Clinton, Iowa - ca. 1890.

an explosion of sawmill and woodworking industries along the Mississippi. Soon lumber rafts were replaced by log rafts, their volume increasing steadily along with the number and size of sawmills along Iowa's shore, fleshing out river towns such as Dubuque, Bellevue, Clinton, Davenport, Muscatine, Burlington, Fort Madison, and Keokuk into major wood-processing centers.

The log rafts brought their own culture to these Mississippi towns. Fastened together, rafts formed mammoth floating islands - the largest on record was 275 feet wide and 1550 feet long. Drifting with the current at an average of 2.5 miles per hour, rafts were crewed by 20 to 35 often-rowdy men who lived under rough sheds and attempted to steer the raft clear of obstacles. After the Civil War, these crews were replaced by steamboats whose towing speeded the logs downriver, heightening their rush to profits. From 1870 to 1900, log rafts constituted the greatest volume of traffic on the upper Mississippi.

Once the logs landed in the river towns, they were sawed into lumber at large mills which constantly were upgrading with the latest in sawmill technology. Lumber companies were fiercely competitive, vying for quick profits in a highly speculative marketplace and often achieving great wealth. Here too the logs brought with them a distinct culture. It was later written that visitors of Clinton remembered "...the monstrous piles of sawed lumber that covered the river front, and the long banks of logs that lay inside their booms for miles along the shores... The river front was rife with the screams of big seven-foot rotaries tearing away the slabs and the rush of the gangs as they turned solid logs into boards and dimension timbers... Still the logs came down the river, the saws hummed and the mill owners and mill hands profited." (*Swisher, p 74; from Marshalltown Times Republic, 11/25/04*) Near Clinton and in Muscatine, sawdust from the sawmills was sufficient to clog the river, convert it to dry land, and form new territory for extensions of those cities.

Few today realize that the surging westward press of settlement combined with the availability of abundant logs and river transport to make Iowa,



Steamboat moving a wood raft down the Mississippi River near Clinton, Iowa.

for a brief period, one of the nation's leading lumbering states. Iowa was the center of a sawmill industry of considerable magnitude. For three decades, from 1859 to 1889, Iowa steadily produced from 2 to 3% of the nation's lumber. In 1869, the state placed ninth in lumber production among all states. The sawmills turned out prodigious quantities of white pine lumber, laths, and shingles. In 1879, 374 million board feet of rough Northwoods-bred lumber was cut in Iowa; a decade later, at the peak of production, that quantity had soared to 540 million board feet. Clinton far outstripped her statewide neighbors in the amount of wood processed; in 1877, Clinton and nearby Lyon's mills had an annual capacity of 154 million board feet, over 40% of the state's total.

The young state's economy profited accordingly. Iowa's peak lumber production spanned the 50 years between 1860 and 1910, the years that large sawmills received logs from thousands of rafts

and processed many billions of board feet of Wisconsin's white pine. During that time, the Mississippi's riverside towns flourished because the mills provided livelihood for a considerable number of employees. Sawmills, the first important industries of these towns, converted them into major manufacturing centers which became a dominant factor in the state's economic life. From 1859 to 1889, the sawmill business was one of Iowa's top three sources of income, along with flour milling and meat packing. In 1889, the lumber produced at all Iowa mills was valued at \$12 million of the state's total \$125 million of industrial products. That year, nearly 7,000 sawmill employees garnered over \$2 million in wages.

The sawmills spawned woodworking industries of all types. While some of Iowa's lumber was exported to new settlements burgeoning to the west, much remained to be processed in planing

mills that sprouted up in riverside towns near the sawmills. These manufactured sash, doors, window and door frames, and interior wood. There also were plants for making coffins and various wooden packing boxes. Furniture establishments were common near the mills. Burlington already in 1855 had firms for manufacturing shingles, matches, and wagons, among other things. Wagons also were built in Davenport, along with wash-tubs, furniture, and even pianos. Keelboats were constructed in the boat yard at LeClaire, just north of Davenport, along with barrels, cabinets, and wagons.

With the first log raft floating down the Mississippi, another whirlwind of forest harvest and wilderness settlement had started its spin. Unlike Iowa's small sawmills with their locally grown, processed, and consumed lumber, the much larger riverside industries fashioned much of their white pine for shipment to points in Iowa, Illinois, Missouri, Kansas, and Nebraska, where they fed development in treeless prairies and westward into the Great Plains. To link these lucrative markets to the lumber and wood products they desired, railroad feeder lines were constructed leading outward from the sawmill towns. These supply networks stimulated more settlement, which in turn created more demand for wood and fed back lucrative profits to Iowa's burgeoning lumber industries.

This process was especially significant to Iowa's prairies which, despite their rich black soil, had been largely ignored because they lacked trees for construction, fences, and fuel. By the 1860s, white pine was being loaded onto trains to build clapboard houses and barns throughout the state. Without this imported, commercial lumber from the vast northern pine forests (or a suitable substitute), Iowa's cornfields might today still grow big bluestem and coneflowers, her cattle might be bison, and cackling chickens might be booming prairie chickens.

The lives of Iowans still were based on wood, even though iron was beginning to take wood's place in many objects and processes. Children's toys, household objects, furniture, farm-



Conveyor moving logs into the mill.

steads and homes, tools, virtually all parts of life depended on the transformation of trees, including one significant recent addition: paper. In the mid-1800s, the demand for paper had outstripped the availability of rags which then were universally used for its manufacture. About that time, three commercially feasible processes were invented for making woodpulp from the long fibers of ground spruce. The introduction of woodpulp paper had a revolutionary effect on journalism and publishing, increasing the availability of printed matter and encouraging the spread of literacy.

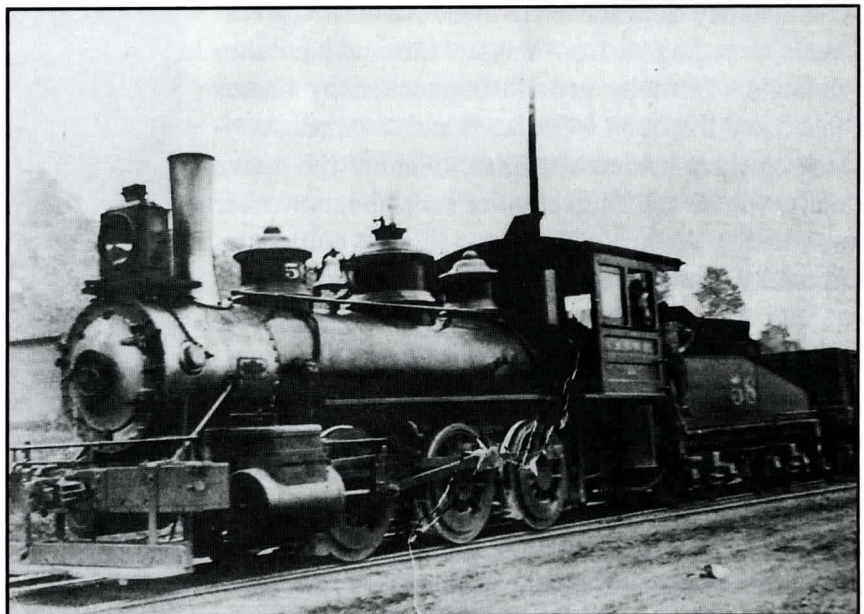
With prodigious amounts of white pine transported by an extensive railroad network, farmers no longer were dependent on local timber and sawmills. However, Iowa's native woodlands continued to be harvested for fuel, fenceposts, construction, and repair materials, and the small sawmills scattered through Iowa's hinterlands continued to turn out locally grown lumber. Local sawmills reached their highest production level of 68 million board feet in 1889, the same year that Iowa's white pine production peaked at 537 million board feet.

Perhaps the most important use of Iowa's native woodlands in the late 1800s was for transportation. From earliest settlement, wagons, bridges, and boats had been made of wood. And for decades already, wooden steamboats had eaten their way up the Midwest's major rivers, stopping regularly to cut riverside forests and stack their decks with cordwood for fuel. Now railroads were spanning the state and tying each town to a vast supply network. As their grid of tracks penetrated the state's interior, carrying lumber to her innermost recesses, they consumed entire forests. Railroads required wood for virtually every need: construction of cars, trestles, and stations; fuel for the firebox; posts to lift high the accompanying telegraph wires, and

for the crossties, which annually needed to be replaced by the millions. A tie of white oak lasted but seven years. Laying a single mile of track might require six acres of oak woodland; an 1893 estimate claimed that railroad construction consumed a fifth of the nation's entire forest area.

Iowa's lumbering industry simultaneously promoted the industrial development of eastern Iowa and stimulated the conversion of Iowa's more western prairies to farmland. As with the eastern forests before them, both Iowa's native woodlands and the northern pineries were cut in a boom-and-bust fashion, with harvest far exceeding the natural rate of regrowth. The lumbering industry treated the midwestern forests as inexhaustible, employing methods that even then were called "criminally wasteful." Like the crest of a wave, the wood-consuming westward-moving frontier of settlement passed into and through Iowa. The Northwoods' magnificent white pines and Iowa's virgin hardwoods were converted to cities and farmsteads. And then the crest of the wave moved westward once again, searching like a hungry giant for the next forests to devour, leaving in its wake a collapsed sawmill industry and depleted woodlands.

Once the vast forests of white pine started to shrink, the decline of Iowa's lumbering industry was swift and final. Production dropped rapidly after reaching a high point in 1889. By the end of



A steam locomotive - ca. 1903

the 19th century, the rafts of pine which once had clogged the Mississippi had ebbed to a trickle. Iowa's rank among the leading lumber-producing states plummeted until, in 1899, Iowa was no longer listed. Logging ended on the Chippewa River in 1905, the last year a log raft landed in Iowa, and the last lumber raft landed 8 or 10 years later. Only a few large sawmills along the Mississippi were in operation by the end of 1906, and Iowa's sawmill industry again became a local one.

By this time, Iowa's original woodlands and savanna groves had long since vanished. Already by 1875, they had been reduced from their original 6.7 million acres to 2.5 million acres. Many had been cleared and converted to cropland or pasture. Those that remained, often surviving on the poorest soils and steepest slopes that had not succumbed to the plow, had been cut and recut without thought to the future. With the choicest individuals removed, only the smaller, scrubrier members remained. The vast majority of Iowa's timber lingered in farm woodlots, and most of these were pastured by cattle which packed the soil, exposed tree roots, and injured both mature and seedling trees, condemning the woodlot ultimately to an untimely death.

Iowa's native tree populations had been reformed by another subtler process: the quenching of the natural prairie fires by the early settlers. Immediately trees started to invade unburned grasslands, creeping up from the streams and back into uplands. Shrubby growth unchecked by flames thickened the open woodlands and savannas, converting them to dense tangles. Neither the native oaks, whose seedlings require sunshine, nor other sun-loving species of open woodlands could successfully reproduce in such sites.

Still another major impact involved the homogenization of Iowa's original forests and grasslands: lands once wooded now grew crops or pastured cattle, and where prairie had once reigned, planted trees of one type or another were asked to serve their human cultivators. Trees shaded city streets, school grounds, and parks. Neatly rowed orchards drooped with bowers of fruit. And farmsteads were enveloped by shelterbelts which fended

off both the winter's cold winds and the summer's scalding sun. Shelterbelts also were praised for their ability to protect the fields from the winds which dried their soil or, worse still, carried it away. Oftentimes these tree plantations — "artificial forests" differing greatly in type and location from Iowa's original timberlands — housed nonnative species, providing yet one more assault on Iowa's native woodland flora and inviting new, sometimes discordant types of ecological relationships into the state.

Although Iowa's citizens viewed some of these changes as beneficial, others were seen in a less positive light. Across the state voices were heard protesting the misuse and demise of those woodlands that remained, mourning the declining wildlife, and pleading for the replanting of woodlands on misused lands. "Nature asks for nothing but defense - only for protection," stated Thomas Macbride, one of our early natural historians and conservationists. "We speak of parks and wildlife and summer splendor, and Iowa responds. In this



A portrait of Thomas Huston Macbride

interim of our advance, let us teach our people reverence for the silent power and magnificence of nature as she works incessantly for our good." (*Cooper, p 315*) These voices decried the waste and depletion of resources that had accompanied the rapid settlement of the Iowa wilderness, converting portions of it in less than a century to mud-died streams, replacing towering forests with gully-ridden hillsides, and creating eroded and abandoned farms on land that never should have been plowed.

The voices blended with others heard across the nation, for the early twentieth century was a period when a new conservation ethic was taking hold throughout America. While much of the wilderness had been conquered, we were beginning to see that much had been destroyed in the process. Where were the passenger pigeons, and the Carolina parakeets which had lit the savannas with the colors of the rainbow? What had happened to Iowa's bison and elk? How much had we lost when the state's last wolf howled to the moon, the last whooping crane flopped down upon its nest to warm its eggs, and the last native prairie chicken danced its display to a potential mate? And with most of the once-magnificent eastern forest reduced to a bramble of second growth, with the continued heavy usage of native timber, where would be found the trees for even basic needs? The nation started to call for the establishment of a national forest system and support conservation organizations. Pleas from throughout the country were echoed in the utterances of Iowans who were beginning to see woodlands in a new way: not merely as resources to be harvested, not only as wastelands to be cleared for crops or pastured by cattle. Not just as providers of cordwood and lumber to be continually cut without care for the future. But as resources in themselves, to be replanted, cared for, and intelligently managed, which held worth just as they stood: as soil holders, as filters for the water flowing into creeks, as homes for many of the native species that were declining in Iowa, as spots of recreation, beauty, and peace.

Reflecting this new awareness of the natural world, Americans across the nation were attempting to return to nature and sought their plea-

tures in the out-of-doors. In Iowa, farmstead woodlots and streamside forests took on new meaning: as sites for picnicking, camping, family fun, and community events. Woodlands also became symbols of past values and pioneer ways of life, representing the "wilderness" that in reality had been obliterated. As mechanization of the farm allowed more leisure time, such nature-focused recreation remained local until a few decades later when use of the automobile exploded, allowing Iowans to abandon their woodlots for vacation sites in Minnesota, Canada, and farther afield.

Throughout the coming half-century, many significant initiatives were adopted to preserve and promote wiser use of the state's woodlands. Such initiatives had actually first been discussed many years earlier. Already in 1857, the report of the Iowa State Agricultural Society "lamented the fact that so little attention has been bestowed upon the cultivation of timber... The Board of Directors will not fail to urge its necessity." (*Widner, p 380*) In 1866, the Iowa Horticultural Society had been organized to encourage, among other things, forestry and timber planting. A tree planting movement had led to the establishment of Arbor Day, which was adopted in Iowa in 1874, and forestry was first taught at Iowa State in 1872.

The Iowa Park and Forestry Association, founded in 1901, was able to push some of the many forest-related initiatives into reality. Iowa's first state park, Backbone, was dedicated in 1920, the same year that Iowa State University's Cooperative Extension Service hired its first full-time forester. Reforestation efforts soon were initiated in several state parks, and the first public land set-aside for the full protection of plants and animals was established in Woodman Hollow in 1928. The distribution of trees for planting on state and private lands expanded tremendously in the 1930s, with the labor from the depression-era CCC camps. State-allocated funds during these years also allowed purchase of state nursery lands and soon thereafter of about 12,000 acres in southern and northeastern Iowa, which became our first state forests. Administrative reorganization led to the formation of the State Conservation Commission

in 1935, when the State Forester's position was formed within that agency. Many years later, in 1965, the State Preserve System was established within the Conservation Commission, and under it yet another value of woodlands became officially pronounced: their worth as preserves of some of our finest and rarest natural features, worthy of protection in perpetuity under the highest status provided by law.

Although these new initiatives began to move a small proportion of Iowa's woodlands from private into public ownership and management, the vast majority remained (as they still do) in private hands. Most of these consisted of farmstead woodlots. Farmers in the early 1900s continued to purchase woodlots and to use them as a source of raw materials for construction, fences, and repair. Wood remained the universal fuel of rural areas.

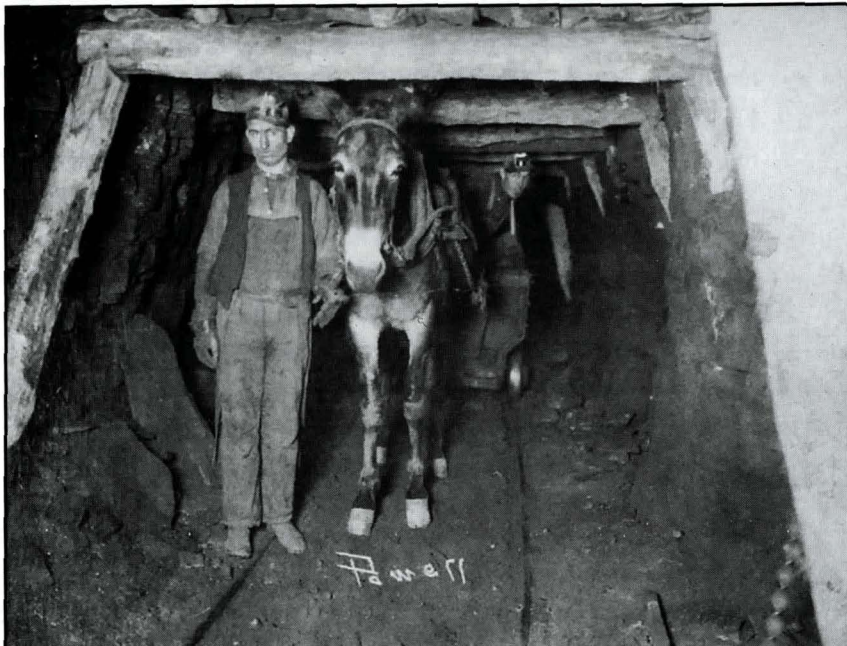
With the demise of large sawmills processing imported logs, Iowa's small local sawmills regained some of their earlier relative importance. While the vast majority of wood products were now imported, the widely scattered sawmills played a significant role in their local communities. Since remaining timber was scattered and second-growth, local sawmills were part-time or portable operations. Major products were rough lumber, railroad ties, mine props, posts, and poles: woodlots pro-

vided the large number of locally grown oak poles needed for the newest communication gadget, the telephone. When crisis struck, Iowa's woodlands were called upon to bolster the nation's security. During World War I, a drive to boost the use of wood fuel led to an increase of an estimated 1/2 million cords annually, thus releasing coal for essential war industries. Small sawmills produced a significant number of walnut gunstocks for the soldiers of the Second World War.

The planing mills that had formed as a natural spin-off of the large riverside sawmills proved more tenacious in the early 1900s than their sawmill parents. Trains that once had shipped white pine lumber from Iowa's riverside mills to the West now brought lumber from the Pacific Northwest into these planing mills; the trains pulled back out of Iowa laden with highly specialized wood products produced in quantities that were nationally significant. Around 1930, Iowa made 10% of the nation's doors and 5% of the window and door frames. Iowa ranked highest of all states in production of sash, manufacturing 20% of the country's total. At that time the planing mills contributed significantly to the state's economy, ranking ninth in value added by manufacture of any of the state's manufacturing industries. A variety of other much smaller woodworking industries also dotted the

state: manufacturers of baskets, caskets, cigar boxes, refrigerators, furniture, and other products. About half of these remained in counties next to the Mississippi River.

Despite the moves to protect and manage the state's forests, the volume of Iowa's woodlands started another dramatic decline following World War II. The advent of truly large equipment, combined with the rising price of cropland, made the bulldozing of entire woodlots both profitable and feasible. Between 1954 and 1974, Iowa's total woodland acreage plunged by one-third



Miners with a mule-drawn cart moving through a mining shaft

from 2.3 million acres - where it had remained approximately steady since the late 1800s - to only 1.6 million acres, 4.3% of the state's total land. The primary causes of the drop were expanded row crop production and the conversion to wooded pastures, but clearing for reservoirs, quarries, roads, and residential areas also contributed to the decline. The majority of remaining timber lay toward the east along the Mississippi River, with Allamakee and Clayton counties in northeastern Iowa remaining by far the most heavily wooded locales. Wood-

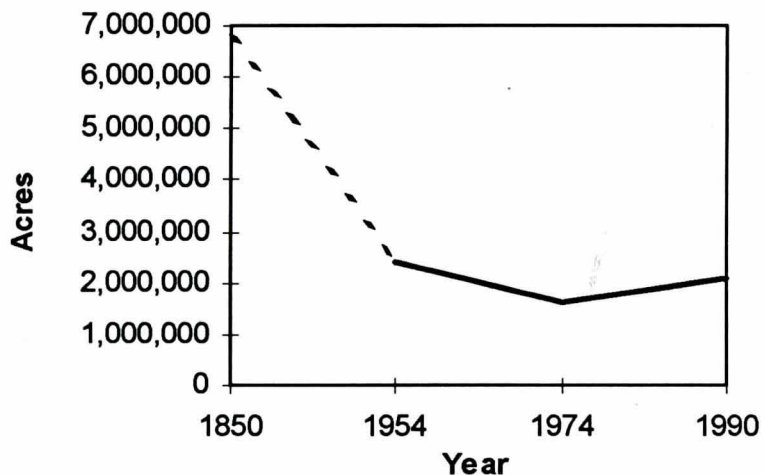
lands throughout the state were concentrated along river corridors. Oak remained the dominant species, although maple, elm, hickory, and cottonwood were also abundant and widely harvested.

Despite the dramatic decline, Iowans continued to cut these woodlands for a variety of purposes. The largest single use was fuelwood - which accounted for nearly 10 million cubic feet of cut logs. But 60 local sawmills, the majority in eastern Iowa, continued to produce lumber: 56 million board feet in 1972. Smaller amounts of Iowa's woodlands were used for veneer and pulpwood. Fence posts, mine timbers, farm timbers, and mulch and livestock bedding also were produced.

Iowa's wood-using industries still contributed significantly to the state's economy. In 1972 they employed 9,200 people in 220 establishments, paying them \$74 million. The manufacture of wood and paper products that year netted the state's economy \$162 million.

When Iowa's wooded lands were next surveyed in 1990, the pronounced decline in forest area had reversed itself. Woodlands, although differing in maturity and species composition from that of earlier years, had increased to 2.1 million acres, or 5.7% of the state. Once again the change was forced by a shift in the farm economy, this time a fall in the number of cattle. Where grazing was eliminated, trees quickly invaded and flourished.

Changes in Iowa's Forest Acres



This process accounted for much of the gain, which occurred throughout the state but was particularly pronounced in southern Iowa. Reforestation of riparian areas and highly erodible land through the federal government's Conservation Reserve Program also boosted Iowa's tree coverage. As before, Iowa's timber remained primarily in private hands, only 8% resting in parks, four state forests (Shimek, Yellow River, Stephens, and Loess Hills Pioneer), and other public holdings. The majority of this land consisted of small parcels under 50 acres, with around two-thirds owned by farmers. Oaks continued to dominate Iowa's woodlands, although the size of maple-basswood forests had increased significantly, rising by 74% to constitute 25% of Iowa's timberland.

Today Iowa's woodlands continue to provide for the state's economy, but with less vigor than in the 1970s. Iowa's timber harvest is declining. While Iowa is recognized worldwide as a source of high-quality oak and walnut lumber, the amount of total forest growing stock harvested in 1988, 24.7 million cubic feet, was half the amount harvested in 1973. Annual sawtimber removals declined from 163 to 95 million board feet in that same period. While the number of small sawmills had risen to 79, the majority in the eastern one-third of the state, the number of Iowa's woodwork-ing establishments fell to 174, most of which were

small, collectively employing 6,000 workers and paying out \$126 million in salaries.

The farm woodlot no longer provides the wherewithal for life, but private woodlands continue to serve many uses in addition to sawtimber. Christmas tree and nut tree plantations yield their wares. Cutting of fuelwood continues, but in 1988 it was only one-third the amount harvested in 1973. Unfortunately, the pasturing of cattle is still practiced in over 59% of Iowa's woodlands, even though such use damages soil and trees and the forage gleaned is too low in value to be of much benefit to cattle.

Private woodland owners now can seek assistance from many sources: Iowa State University's Cooperative Extension Service, the Department of Natural Resources' 12 District Foresters, and governmental agricultural agencies. The State Forestry Nursery continues to distribute trees and shrubs for reforestation. The Iowa Forest Reserve Law reduces taxation of forested land meeting certain criteria, and a number of governmental cost-sharing programs provide incentives for proper woodland preservation and management. The 1950 Cooperative Forestry Assistance Act, for example, stipulated that federal money, matched by the state, would be allocated for technical assistance to private landowners. Through this program professional foresters, hired

by the state, develop a Forest Stewardship Plan which typically guides the landowner to achieve a sustainable flow of woodland goods and services, including everything from wildlife and timber to clean water, recreation, and aesthetic benefits. On the private level, the Iowa Woodland Owners Association is but one of several nonprofit organizations that promote education about woodlands and their wise use.

No longer are large quantities of lumber imported for processing in Iowa, but even though plastics and metals have replaced many uses of wood, life without wood-based products would be unimaginable. Here, as elsewhere, trees processed in one form or another mean the framework and siding of a home; bed, chair, and table; breakfast with the newspaper and the computer printout at work; plywood, veneer, chipboard, and other modified forms of wood for hobbies and building projects; the raw materials and chemicals for industrial processes; broom handles, cutting boards, pencils, matchsticks, toys. Cribs and caskets - our lives are still framed in wood, just as they were for our pioneer ancestors.

As important as these economic and product-based benefits are, they do not constitute the sole measure of worth. The value of Iowa's woodlands, and their significance to her residents, flow in large part from the many other functions they



Native bottomland forest.



A Morrel Mushroom.

serve — as recreation sites, for example, where Iowans retreat to picnic, camp, hike, hunt mushrooms, and catch fish; as game production sites, where deer and squirrel and birds such as pheasant and wild turkey flourish and feed the hunter's gun; and as habitat for non-game species and plants which coax delight from the early morning birdwatcher and from later visitors who come to marvel at the annual unfolding of hepatica, bloodroot, and rue anemone. As useful activity to a local farmer, who sits on a winter's eve laboriously picking the meats from hickory nuts to sell at a premium at a farmer's market; as artistic expression for the craftsman at the Amana Colonies, who fashions locally grown timber into furniture that will please for generations; as community service to Trees Forever volunteers, who plant and nurture trees especially in urban areas. In all these ways, woodland function flows from the beauty and pleasure the woodland provides.

These activities go on while the woodlands quietly filter Iowa's running water, hold her soil, and stave her floodtides. Buffer tree plantings along streams are proving their effectiveness in collecting surface and groundwater pollutants as well as sediments. Shelterbelts and windbreaks multiply the energy-efficiency of homes new and old. And perhaps Iowa's trees even will help us reduce our contribution to global warming: A University of Iowa professor has proposed that tree plantations within the state could, along with other energy conservation measures, reduce the state's net release of the greenhouse gas carbon dioxide to zero. Thus Iowa's woodlands continue to contribute significantly to our quality of life in myriad ways.

That woodlands also serve as scaffold to the health and integrity of the larger natural world is recognized now more than ever. Forest fragmentation - the cutting of treed areas into

smaller and smaller isolated parcels - is a problem here as elsewhere. Fragmented forests fail to provide the needed habitat for migrant songbirds, as well as for rarer species such as the state-endangered red-shouldered hawk. Iowa's woodlands need to be properly managed for other rare species as well. A prime example is the wooded algific talus slopes of northeastern Iowa, with their rare Iowa Pleistocene snails, monkshood, and golden saxifrage. Thus our local woodlands, properly cared for, can help stave the loss of the earth's biodiversity, a major environmental crisis. The Loess Hills Pioneer State Forest, the newest addition to the state forest system, addresses this concern through its policy to preserve all local native ecosystems, prairie as well as woodland.

And what of returning some of these woodlands to the health and diversity they claimed 200 years ago? Throughout the state, managers are experimenting with prescribed burns of oak woods in the hope of opening them up, stimulating oak reproduction, and ensuring habitat for species that require partial sunlight. And at Walnut Creek National Wildlife Refuge, one of the nation's largest prairie and savanna restoration projects, attempts are being made to restore certain of Iowa's native



A newly equipped saw mill.

ecosystems to their presettlement state. There about fifteen square miles of former agricultural land is being burned and planted with native seed to recreate a mosaic of communities typical of presettlement times. With such restorations, the circle of destruction will start to close, until at least some portions of our state will again resemble the vision of earlier native landscapes described by Tho-

mas Macbride a century ago, when "on the clay ridges the white oak flourished sometimes to the exclusion of all [other trees]... To one following some long clay ridge the trees opened on every hand as in a royal park, and out past their clear white weathered boles on a summer day the emerald prairie gleamed and shone to the horizon's end." (*Cooper*, p 189)

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Famous and Historical Trees of Iowa

The Amana Groves

Nominated by: Larry Gnewikow, Amana Forester

Two groves in the Amanas figure into the history of the colony. One is a six-acre white pine plantation planted in 1898 on a sandy ridge deemed unsuitable for cultivation. School children planted the "schulwald" or school forest using 7 by 8 foot spacing.

In later years, the grove was maintained by George Heinemann, the last president of the Amana communal system. During the World War II, several Amana pine plantations were harvested to aid the war effort. However, the plantation in Upper South Amana was spared.

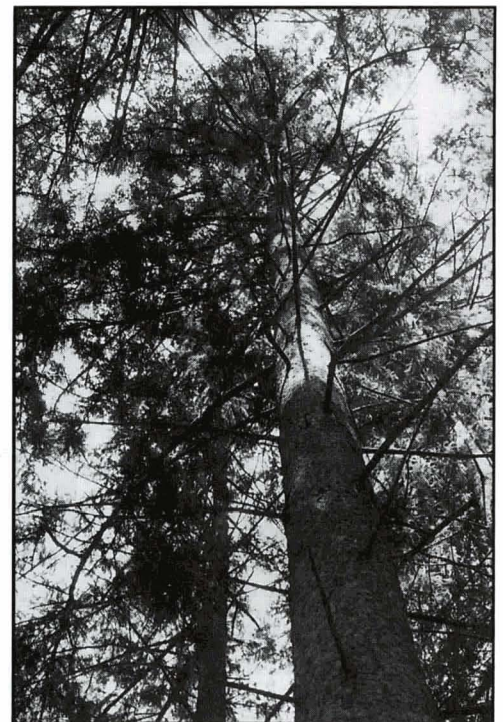
The plantation is special to the Amana people, being used for Sunday hikes and family outings. Although the trees have been thinned and some have died, the grove remains healthy.

During the 1930s, the Amana Church Society controlled nearly every aspect of Amana life. Barbara Heinemann, a Church Society leader, believed in utilizing all parts of the Amana lands, including the space around each building. Because of this belief, she ordered all ornamental trees be removed and replaced with fruit trees.

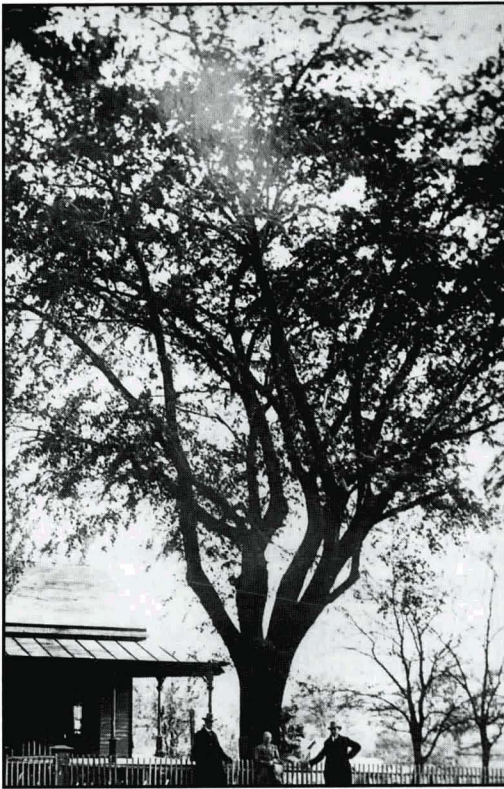
The second grove was planted as a result of these peculiar circumstances. A group of people in Middle Amana decided to dig up their ornamental trees and replant them in the forest northwest of Middle Amana, instead of destroying them. The trees remain today in a location known as the Tannenbaum.



The tips of the Norway Spruce can be seen above the native hardwood trees.



Above - White pine plantation near South Amana. Right - Norway spruce north of Middle Amana



The Ansel Briggs Tree

Nominated by: Lucille E. Sorenson, Jackson County Historical Society

This elm was planted by Ansel Briggs, the first governor of the state of Iowa. It was planted at the site of his home in the town of Andrew (Jackson County) after he moved there in 1842. Briggs served as Governor of Iowa from 1846 to 1850.

In 1925, the Andrew Ladies Literary Association marked the site, and still living tree, with a bronze plaque on a boulder.



The tree died of elm wilt (Dutch elm disease) in 1970 or 1971 and was removed. A slab of the tree can be seen at the Jackson County Museum in Maquoketa.

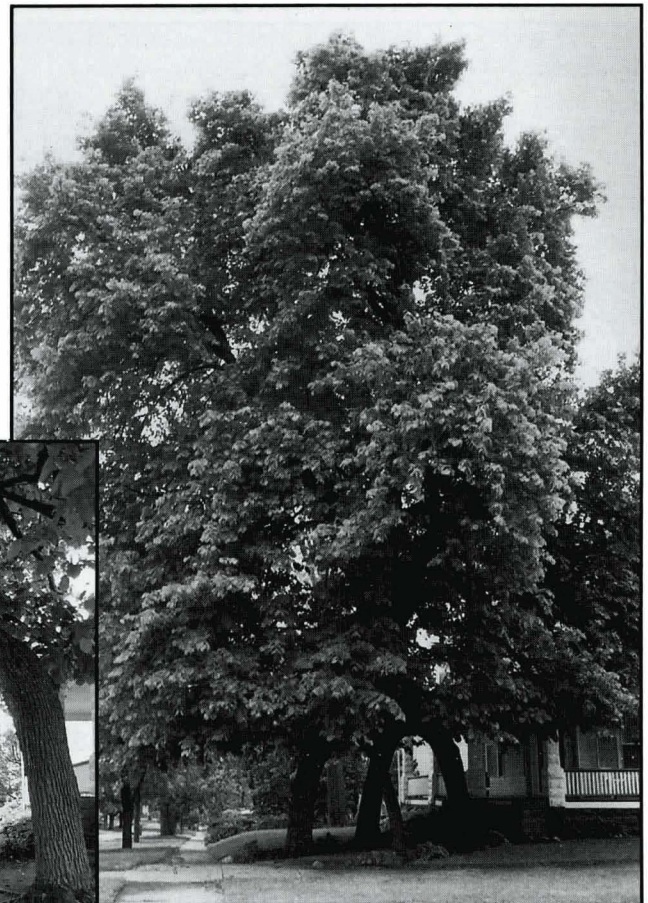
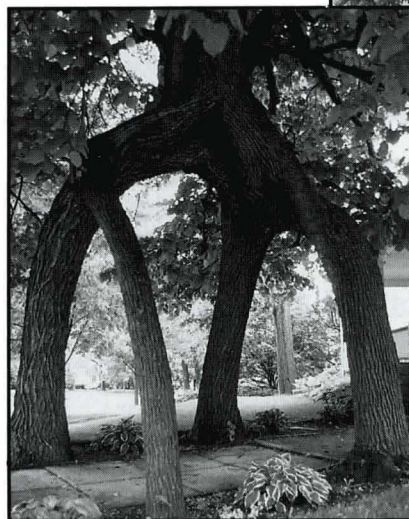
The Archway Tree

Nominated by: Rosie Peterson, Cedar Falls Historical Society

The Archway Tree is actually four basswood trees that were grafted together so they shared one leader. The grafting was done by John Henning, a retired farmer, who enjoyed working with grafting techniques. The trees are located at 1803 Tremont Street in Cedar Falls. Mr. Henning passed away in 1933.

The trees were planted in 1915 and an early picture shows four rather spindly trees joined together about 8 to 10 feet above the ground. Another picture shows that the trees were first grafted together in pairs and then the pairs were grafted into a single stem.

The arch is a great source of curiosity, and many people come to see it and to take photos.



The Big Sycamore

Nominated by: Marion County Conservation Board and Marion County Museum

The "big sycamore" is Iowa's outstanding representative of the species of tree that "grows to the largest size of any deciduous tree on the North American continent." This giant, 22' 11" in diameter at shoulder height, lived for hundreds of years on the Des Moines River bottoms in Marion County near the town of Red Rock. Growing only a few feet from the road, it may be seen from an automobile by driving three-quarters of a mile upstream on the river road at the south end of the Red Rock bridge. The big sycamore survived many large storms and lightning strikes, one blew out the tree's top. With the building of the Red Rock Dam, this giant gave way to modern progress.

Mounds, pottery fragments, arrowheads, axes and spears have been found in the immediate neighborhood. It is doubtful if the tree dates back to the mound builders, but it is certain however that it watched the parade of historic Indians, the Sioux, Iowans, Pottawattamies, Winnebagoes, and Sac and Foxes, as they passed in war and peace, for the red rocks of the Des Moines River from which the old tree springs are well known in the tales and legends of these people.

The vicinity where the tree stood is rich with recorded history of both the white and red races. Prior to 1842, John Jordan's trading post, almost in the big tree's shade, exchanged gun powder, trinkets, and booze for the Indians' fur catch. The old tree for the first time in 1937 heard the whistle of a steamboat, as Captain William Phelps' steamer Pavilion groaned up the river to Fort Des Moines. It watched the settlers cross the Red Rock line at midnight, October 12, 1845, as the territory was opened to white settlers. It heard the guns sound on that occasion, the "land opening," which ended forever the empire of the red man. It watched the settlement of Red Rock become a bustling river town where saloons, murder and robbery were commonplace. It saw the white man occupy the land and in a short century destroy much of the soil. And now in its watery grave, it held the waters of the floods of 1993 from destroying communities and forests downstream.



1937 painting of Sycamore tree by Z.M. Prunty of Knoxville, Iowa. The painting hangs in the Marion County Museum, Knoxville, Iowa.

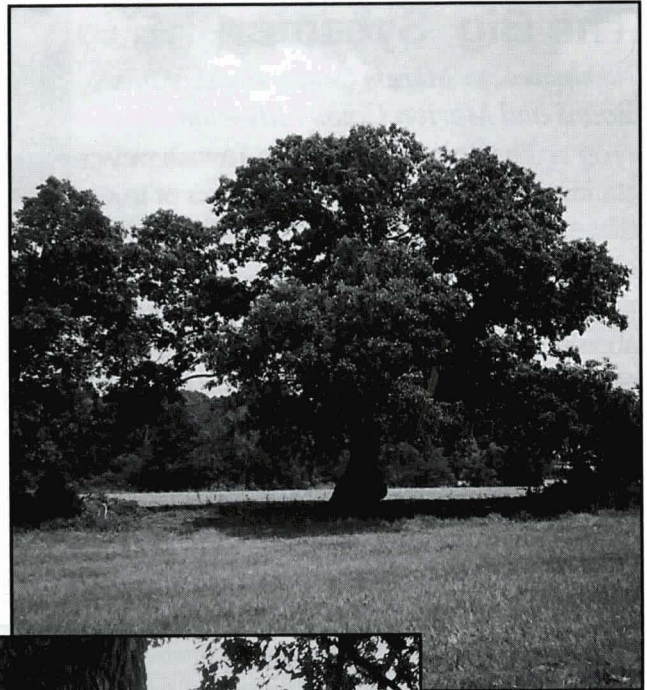
The Black Hawk Tree

Nominated by: Ellis Bailey

The Black Hawk oak is thought to have begun life about 1833, and is still alive today. It was a sapling when the school at Lewin's Point was established. The school became a community focal point for meetings, church services and other events.

Native Americans were a constant threat to the settlers, and one day as a local celebration was being held at the school, a band of native Americans led by Black Hawk stopped by. They were invited to eat and were treated kindly. Upon leaving, Black Hawk tied a knot in a small oak sapling and stated that as long as the tree stood, there would be peace between them and the whites.

The Black Hawk tree still lives, though damaged by a tornado in 1993. The huge twisted tree is approximately 90 feet wide, more than 90 feet tall, and 17.5 feet around the base.



These children are standing on the full-grown knot tied by Black Hawk when it was a sapling.

The Borlaug Tree

Nominated by: Bob Chapman, Iowa Natural Heritage Foundation

The Borlaug Tree is a cottonwood tree and stands behind the boyhood home of Norman E. Borlaug, the only agricultural scientist to be awarded the Nobel Peace Prize. The prize was awarded in 1970 for his work in developing high-yielding wheat.

The tree is 14 feet in circumference and is located in the town of Protivin, Howard County.



The Bur Oaks of Shady Oaks

Nominated by: Mary C. Gift

Shady Oaks is the name of a grove of bur oak trees in eastern Marshall County. They are 150 to 200 years old and were part of 5,000 acres of the best timber in Marshall County. Today, Shady Oaks is the home of Shady Oaks RV and Mobile Home Park and the Big Treehouse.

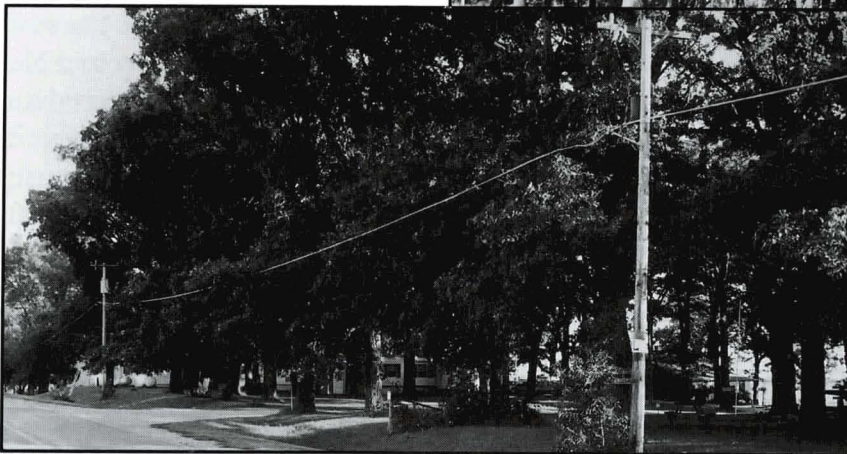
The grove has been a witness to the activities of native Americans and early Iowa settlers. Trappers and hunters traveled along the river and stream where the grove is located in search of fur and game. A wagon road lead past Shady Oaks to the Rock Valley Grist Mill that operated from 1849 to 1880. The grove served as a resting place for people waiting for their grain to be ground at the mill.

In the 1850s, the grove was the site of early Methodist

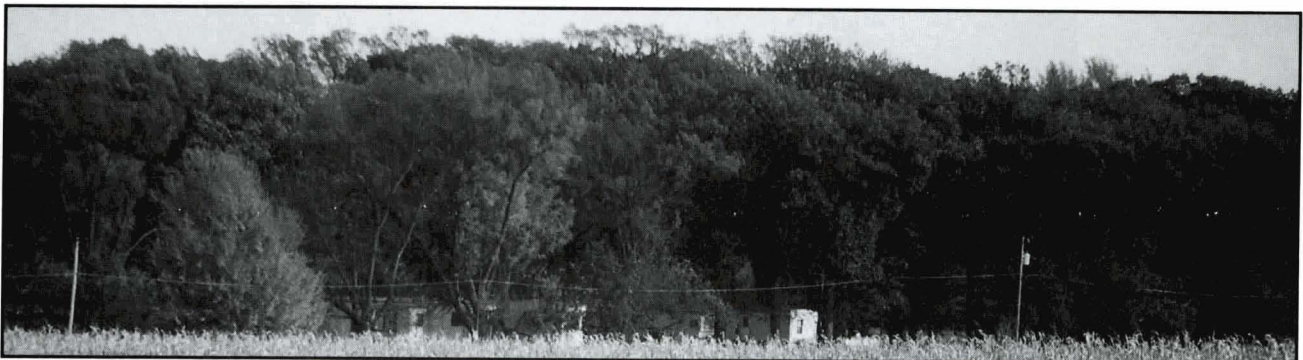
revivals and meetings. The first Methodist Mission in the county started in the Rock Valley Mill. Families came and stayed for several days.

From 1862 to 1885, the grove was the site of the first Rock Valley School and Meeting House.

The road was one of the first roads in the area. It became part of the Marengo to Fort Dodge State Road and Western Stagecoach route. In 1913, the road was designated as part of the Lincoln Highway (U.S. 30).



Above - Before clearing to start the cabin camp - 1924. Left - Entrance to Shady Oaks - 1995. Below - A stand of bur oak trees on the west side of Shady Oaks - 1995.



Byal Orchard

Nominated by: William C. Page, Public Historian and Hans J. Brosig, Jasper County Historical Society

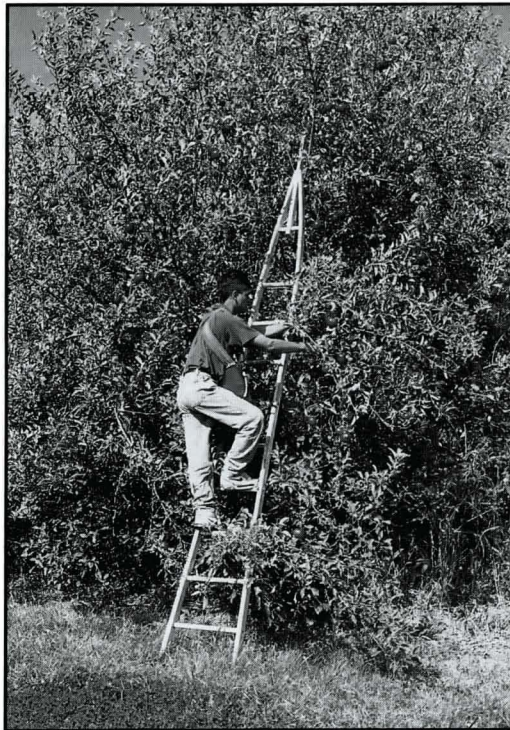
The Byal apple orchard is located near Mingo. It was planted in 1933 and 1934 and is significant because it illustrates the relationship between science and practice in Iowa agriculture.

The following is taken from the registration form for the National Register of Historic Places:

The Byal Orchard illustrates how “during the late (nineteen) thirties a strong new growth of apple orcharding occurred under the direction of competent growers” (*Iowa State College: 187*). Such competence is illustrated in the historic district by employment of Hibernian root stock and topwork grafting, a historic method of orchard planting no longer in use.

Significant dates for the Byal Orchard Historic District include 1933 to 1944, when the orchard

was established and began early maturation. In 1936 the windbreak of Ash and Mulberry was planted to protect the apple trees. When the Armistice Day blizzard of 1940 wiped out most of Iowa’s apple orchards, the Byal Orchard continued to thrive validating planting techniques advocated by researchers at Iowa State College and implemented by progressive fruit growers, Hugh and Roscoe Byal.”



The Church Tree

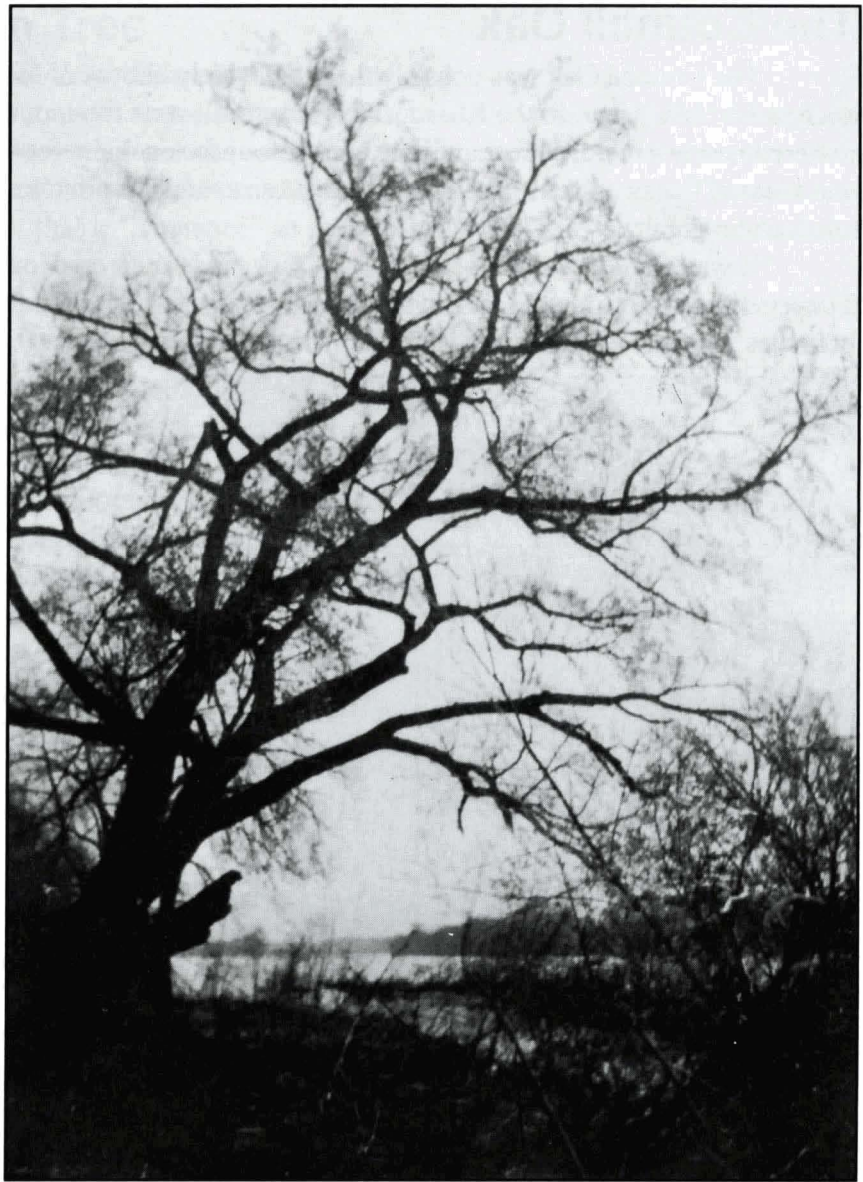
Nominated by: Maxine E. Hughes

The Church Tree was a large elm tree which grew in Van Buren County, beside the "river road" near the junction of Chequest Creek and the Des Moines River. In August of 1837, the first church service in Iowa west of the Des Moines River was held under the branches of this old tree.

The tree figured prominently in the meetings of native Americans, early settlers and later day inhabitants of the area. Legend and historical record refers to it as a place where people would gather for meetings..

Services continued to be held under the tree. In August of 1941, a bronze tablet was placed on a granite boulder under the tree and dedicated. By 1952, the old tree was being threatened by undercutting from the swiftly flowing Des Moines River. A replacement tree from the same farm was planted in its place as a symbol of the old tree. Then in June of 1952, high winds finally blew it over.

By 1972, the replacement tree had died of elm wilt (Dutch elm disease). A hackberry tree was planted in its place near a monument by Norwood Teal and a few hedge plants by Roscoe Hughes.



The Council Oak

The Council Oak was possibly the most widely known of Iowa's famous trees. This gnarled and ancient bur oak grew on the Missouri River bottom near the mouth of the Big Sioux River. The tree towered nearly a hundred feet and was almost four feet in diameter at the base. Its twisted, broken limbs and areas of decay added impressiveness to its size, and it wore the scars of battling Iowa's weather with aristocratic dignity.

It was an old tree when Lewis and Clark made their epic journey up the Missouri River in 1804. The legend of the Council Oak says the explorers called the Indians to council and under its spreading branches smoked kinnikinnick with the native headmen, although the detailed journals of Louis and



Clark do not mention this meeting. Tradition also holds that years before the famous expedition this giant landmark furnished shade and shelter for the numerous councils of war and peace between Indian tribes of the region. It is said that the last Indian council held under Council Oak was in 1854, called by Smutty Bear regarding white surveyors operating in the area. Some people doubt part of these romantic tales. It cannot be denied, however, that this grand tree has faced the centuries in a location rich in history, and there is little doubt that it served as a beacon, even before white man's occupancy.

The Council Oak was more than 350 years old when it was struck by lightning. The remains of the tree were bulldozed into the river in 1971. Today, in a public recreation area, a marker and a replacement tree mark the spot where the Council Oak once stood.

The Delicious Apple Tree

Nominated by: The Madison County Iowa Historical Society

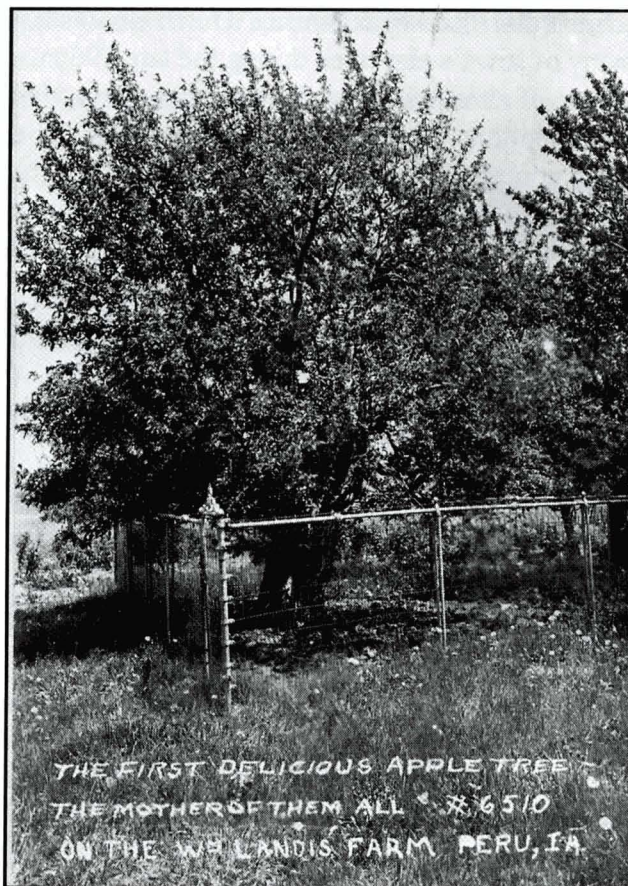
Iowa's most important tree from an economic standpoint, and one with worldwide fame, is the original Delicious apple tree, whose birthplace was southeast of Winterset in Madison county. This famous tree grew as a sprout from a Yellow Bellflower grafted on a Vermont seedling, and it might have been "born to blush unseen" except that it "happened" in the orchard of Jesse Hiatt, a man who loved and understood fruit.

In 1893 Hiatt introduced the new apple to the world by entering it in a show at Louisiana, Missouri, with this statement: "I am nearly 70 years old and have raised apples all my life and would not willingly overestimate, but if this is not a better apple than any of your large list, it will cost you nothing."

After this show the apple was purchased by Stark's Nursery and named the "Delicious." Its scions were grafted on hardy rootstock by that nursery and distributed throughout the United States. The Delicious apple has steadily grown in popularity and is now one of the leading commercial varieties, its quality and productivity unequaled by its competitors. The Delicious is a large, red, waxy-surfaced apple, the aromatic fragrance of which is as familiar to Americans as the whistle of the train on which the "candy butcher" tempts the traveler with "Epples! Epples!" and the name "Delicious" in recent years has become almost synonymous with "eating apple."

In 1922, when the fiftieth anniversary of the Delicious was observed, the parent tree was dedicated by a monument and surrounded by an iron fence. At that time the original tree was the parent of almost 8,000,000 young trees with an annual commercial production of 4,000,000 bushels of first-grade fruit valued at \$12,000,000. Since 1922, many more millions of trees have found their way into America's orchards, and the annual value of the fruit has steadily climbed.

The original tree died as a result of the severe winter of 1940-41, but trees from the original roots continue to grow within the iron fence. The Delicious apple is another proof of the motto "Of all that is good, Iowa affords the best."



The First Delicious Apple Tree - Peru, Iowa.

Des Moines Valley Friends Elm

Nominated by: Martha Gerstenberger, Des Moines Valley Friends Meeting

This American elm stands on the grounds of the Des Moines Valley Friends Meeting House and is approximately 100 years old. It is about 60 feet tall and is registered with the Elm Tree Research Institute of New Hampshire.

Thus far the tree escaped infection by the elm wilt (Dutch elm disease) organism. Dutch elm disease killed many of Iowa's elm trees during the late 1960s.

If elms are noted for their symmetry, this tree is no exception. Attendees at Quaker meetings can sit in silent contemplation and admire the beauty of this tree.

The Des Moines Valley Elm may be the only remaining American elm still standing on Grand Avenue.



The Ferry Tree

Nominated by: Mary Warner, Bonaparte Historical Society

The Ferry Tree at Bonaparte stood on the north side of the Des Moines River, a quarter of a mile west of the bridge, between the T. W. Boyer and Kirk Meek homes. The hard maple, four feet in diameter, secured one end of the cable which assisted the ferry in passing from one shore to the other. By 1940, many of the Ferry Tree's branches were dead; and by 1950, the tree was completely gone.

In 1876, the Meek Brothers obtained the rights to operate a ferry at this site. It was used until 1878, when the Bonaparte bridge was completed. Before the bridge was built, the ferry was the only means of reaching Bonaparte from the other side of the Des Moines River when it was too high to be crossed by fording.

The Froelich Grove

Nominated by: Barbara K. Dickson, Froelich Foundation

The Froelich Grove of larch and white pine trees was planted from seed by Henry Froelich, the first settler in the village of Froelich. He arrived from Germany in 1847 and missed the pine forests of his homeland. When he returned to Germany for a visit in 1887, he obtained seeds which he brought back to Iowa and planted.

In the beginning, there were over 500 trees in the grove. Over the years, wind, lightning and natural causes have thinned the original grove to about 250 individual trees.

Henry's eldest son built the first gasoline-powered tractor at Froelich. That machine led to the development of the Waterloo Gasoline Traction Engine Company. The company was sold to John Deere in 1918 and began to produce tractors at the plant.

Henry Froelich died in 1896. The grove stands as a reminder of his love of this little community and the pine forests of his homeland.



The Green's Sugarbush

Nominated by: Karen Green

The sugarbush is a group of hard maples mixed with oak and basswood. The trees have been tapped for the sap to make maple sugar since the Green family came to Iowa in 1851. Since then, five generations of Green's have taken part in the operation and maintenance of the sugarbush.

Sap from the maples is still collected in the traditional way, by letting it drip into buckets hung on the trees, and then by visiting each tree daily with a horse drawn sleigh or wagon to collect the contents of the buckets.

The farm is located southeast of Decorah. The sugarbush have been tapped for more than 150 years and may be the oldest continuous business in the state of Iowa.



The Green Tree Hotel

Nominated by: Otto Ewoldt

Noblest among the tree celebrities of the upper Mississippi Valley was the famous elm claimed by the old river town of LeClaire, Iowa. From considerations of size, beauty and historic association this elm was a tree of exceptional interest and personality. The LeClaire Elm was the name by which this tree became known throughout the Mississippi Valley, but to the residents of the village and surrounding countryside it was the "Green Tree".

In the river days immortalized by Mark Twain in the "Life on the Mississippi", the village of LeClaire was an important river port because of its position at the head of the upper or Rock Island Rapids. Most steamboats plying the upper Mississippi stopped here before starting across the rapids or after having passed them. A few rods upstream from the landing place there stood by the water's edge a shapely elm with branches over-arching a large plot of sloping ground. This naturally became a famous resting spot for the river men from far and near who came to LeClaire. Under the grateful shade of the elm they congregated, spread their blankets and cooked their meals, often making this spot home for weeks at a time. With a charactersitic Yankee humor they dubbed this inexpensive open-air lodging house "The Green Tree Hotel", and by this name it came to be known among the river men from St. Paul to New Orleans. During the river town heritage of LeClaire, the village's youngsters - the Tom Sawyers and Huck Finns of LeClaire - met under the elm, played games and concocted mischief. Perched on the roots of the tree they could dangle their bare feet in the current and wriggle their toes in the sand. In 1924, a monument was erected at the base of The Green Tree by Joe Barnes, to honor a friend and one of boys of those faraway days - William F. Cody, known to all of us as "Bufalo Bill". William Cody was born in LeClaire and spent his boyhood there under The Green Tree.

In 1899, LeClaire found on a new railroad the Delaware, Rock Island and Northwestern, being constructed along the Mississippi river from Davenport, Iowa northward. When the new route was surveyed, the line marked out by the surveyors cut directly through The Green Tree! Which was to give way, the tracks or the tree? "The tree," said the railroad officials. "Not so!" said the villagers, roused to the defense of their famous tree-citizen; and the permit which they granted the railroad for running its tracks through town was conditional, bearing this proviso: spare The Green Tree, or no tracks! And the tree was spared. A part of the rail line was resurveyed, so that the tracks might run to the west of The Green Tree. In 1937, Herb Kendall a tree surgeon from Rock Island, Illinois recorded the size of The Green Tree as a Rock Elm, over 200 years of age, 65 feet tall, circumference of tree trunk at 4½ feet above the ground as 13 feet 6 inches, with an average crown spread of 107 feet. The Green Tree died of Dutch Elm Disease in 1964, with a bottom slab when it was cut down was 21 feet 6 inches. This slab of The Green Tree is preserved and on display at the Buffalo Bill Museum in LeClaire. The Green Tree is the only Rock Elm west of the Mississippi River listed in the Smithsonian Institution Hall of Fame of Trees.



The Jordan Oaks

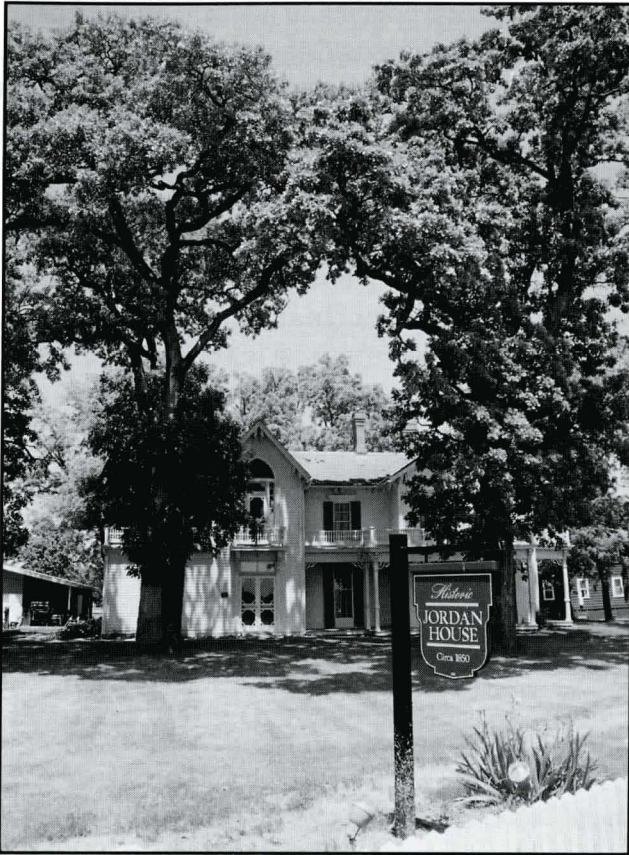
Nominated by: Louise Gately, West Des Moines Historical Society

James C. Jordan came to Iowa to settle in 1846. He located his homestead in a grove of bur oak trees across the river from what are now Brown's Woods and Walnut Woods State Park. Many of the

trees that were in existence then are still alive. The grove contains walnut, mulberry, ash, hackberry and linden as well as bur oak.

The Jordans figure prominently in the early history of the area. They first built a cabin and later a house in the grove. The house was a stop on the underground railway, and many former slaves passed through on their way to freedom. John Brown, the abolitionist, stayed at least twice at the Jordan House, once when he was leading a group of 12 slaves to freedom..

The village of Valley Junction was founded by James Jordan. It later became part of West Des Moines. The home and the trees surrounding it have been a fixture of the community for many years. In 1978, the property was acquired by the by the West Des Moines Historical Society.



Keokuk's Lookout

One balmy spring day a little more than a century and a half ago the wooded hills along the Des Moines valley threw back in echoes the shrill scream of a steamboat whistle for the first time. The age-long stillness of the forests was broken, the nesting robins startled from their coverts and a few deer scrambled wildly along paths leading to the high prairies. A small vessel was rounding the "rattlesnake bend" of Iowa's largest river just below the Raccoon forks. There were men in uniform on the boat, a company of United States dragoons, also a band of Sac and Fox Indians and their chief Keokuk. The next day, May 20, 1843, Captain Allen hoisted a flag with 13 stripes and 26 stars at the location of Fort Des Moines. Chief Keokuk looked on sullenly and in thoughtful mood. Then he and his family moved out on the edge of a low plateau far to the east and established their camp, not far from where the Iowa state capitol now stands.

Chief Keokuk noted, as he came along the winding river, a ridge of high hills to the south overlooking the entire region at about the juncture of the two rivers. He saw a fine young elm tree standing alone on the ridge. When his camp had been established, the chief beat a path to the elm tree, and climbing up to the largest limbs he found he could see the new military camp in the distance and all between. It was a splendid lookout. He might have need for a watching post, for there were hostile Indians who came down the valley without notice.

For three years the Sac and Fox Indians had their homes near the new fort at Raccoon forks. The Sacs, under Keokuk, were located to the east and that was where the government agency had been built and most of the traders had their factories. The Foxes, under Chief Poweshiek, camped in the edge

of the woods to the north on the west side of the Des Moines. They were near the dragoons at Fort Des Moines and nicely located for hunting along the Raccoon valley.

Chief Keokuk often sent a trusty scout to climb the elm tree just beyond the "rattlesnake bend" to keep a sharp eye for any intruders, either white or red, whose presence might forebode trouble. Many were the steamboats that came puffing up the river in the following years. The elm tree was a fine place for meeting when there were ceremonies on the open land to the west known as "Keokuk's Prairie."



Keokuk - Chief of the Sac Indian tribe

The Lewelling Apple

Nominated by: Donald E. Young, Henry County Historic Preservation Commission

The Lewelling apple tree, on the grounds of the Lewelling Quaker Shrine at Salem in Henry County, grew from a cutting planted in April 1969. The original tree, once part of an orchard, survives today on the grounds of the Waverly Country Club in Oregon.

The Lewellings were involved in the nursery business in North Carolina and Indiana before coming to Salem, Iowa in 1837. In 1847, they loaded their nursery stock consisting of 700 trees in wagons and moved to Oregon. In February of 1848, ground was broken for a nursery in Milwaukee, Oregon. It was cuttings from these trees that were sent back to Salem 120 years later.

Henderson Lewelling is often called the Father of the Fruit Industry in the northwest. His memorial in the Mountain Cemetery bears the inscription, "Father of the Great Pacific Fruit Industry".



The Lewelling Apple Tree with the Quaker Shrine in the background - 1995.

Lone Tree

For miles along the prairie trail, a monotonous sea of waving grasses brushed the sky on every horizon. Then far on a distant crest, the outline of a single tree could be seen. "Ne-Te-Quil!" (Lone Tree) and a score of Indian ponies and their painted riders flowed like apparitions to the shelter of the great elm tree's shade. . . Rendezvous.

Heads bowed and panting, the yoke of oxen plodded deliberately along the trail, dragging the squeaking wagon westward, inch by inch through the heat waves of the open prairie. The animal-like cry of a small child came from the canvas-covered oxcart and was quickly lost in the sameness of the grasslands. With the sight of the lone tree, the ox team noticeably lifted from its lethargy, and the rasplike music of the axles increased in tempo. Here was rendezvous and shade.

Lone Tree is a mystery tree. How it "happened" and how it missed the ravages of fires that regularly swept the prairies is not known. However, it served for many years as a guide for aborigine and pioneer alike. The tree stood alone on the prairie midway between the Iowa and Cedar Rivers in Johnson County, along a trail as well known a hundred years ago as Highways 169 and 30 are in modern times.

The Lone Tree, standing on a high point of the prairie, near town, was used as a surveyors' landmark. The town of Lone Tree was laid out in the fall of 1872 by John W. Jayne and received its name from this large white elm.

The Lost Grove

Nominated by: Doris Anderson, Webster County Iowa Genealogical Society

The landmark grove in section 13 of Webster County stood alone on the prairie when it was first discovered by white settlers of the area. This discovery took place in 1863 and because of its isolation, was given the name, "Lost Grove". In 1869, when the township was organized, it was called Lost Grove Township.

The lost grove figures in the ordeal of a stage driver, Charles Hale, who became lost on a trip from Twin Lakes to Fort Dodge during the blizzard of January 1867. Leaving his stage and horses, he traveled on foot for three days until he saw the grove in the distance. As it was nearing nightfall, he dug into a snow bank to spend the night thinking he was near the Des Moines River and the possibility of assistance.

In the morning light, Mr. Hale could see that the grove stood alone on the prairie, but the cabin was located some distance away. He found the only way he could move was by lifting each foot with his hands. He finally reached the cabin after eight hours. He was taken into this home and nursed back to health.

Today, the grove, once used by travelers to find their ways across the prairie, stands just southeast of the town of Harcourt on the farm of Orville Anderson.



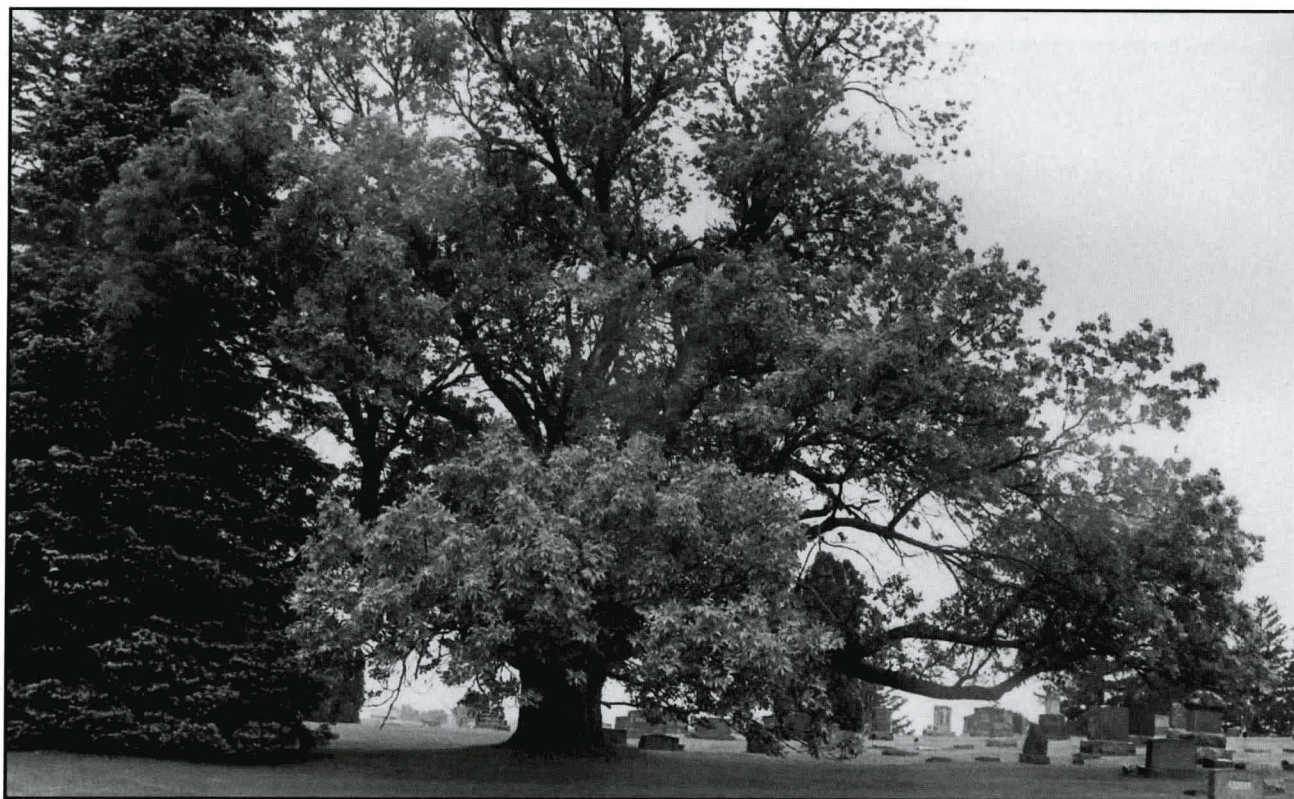
The Monument Tree

Nominated by: Doris Anderson, Webster County Iowa Genealogical Society

The Monument Tree stands in Lost Grove Cemetery southeast of Gowrie in Webster County. It is called the Monument Tree because it was planted in 1872 by Swan Chalstrom in the cemetery where he buried his wife.

Swan Chalstrom and wife Clara immigrated from Sweden with their two small children. They arrived in the Gowrie area in the summer of 1871. On February 5th the following year, Clara gave birth to a baby girl. The infant lived, but the mother died hours later. That baby girl was the first white child born in Lost Grove Township.

The green ash seedling planted by Swan Chalstrom has grown so large that its size dominates the view at the Lost Grove Cemetery. The branches of the crown stretch between 20 and 30 feet and the trunk measures nearly 20 feet in circumference.



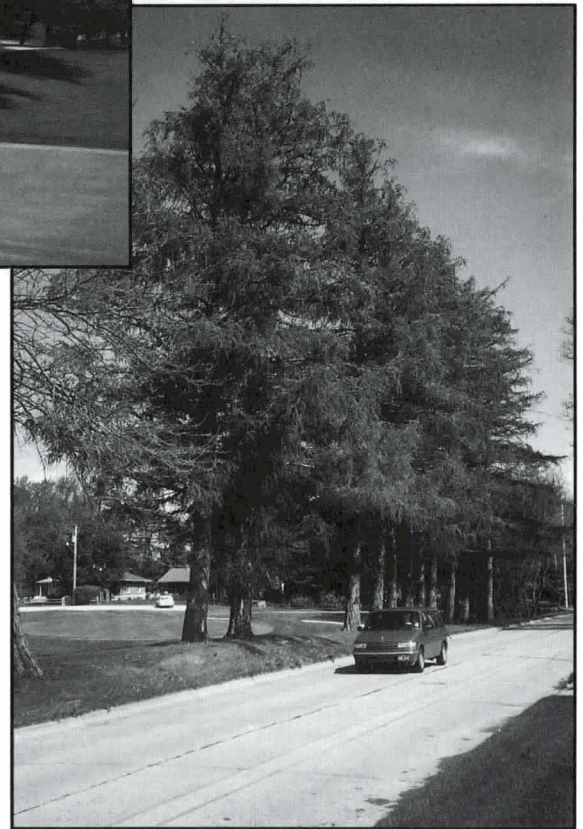
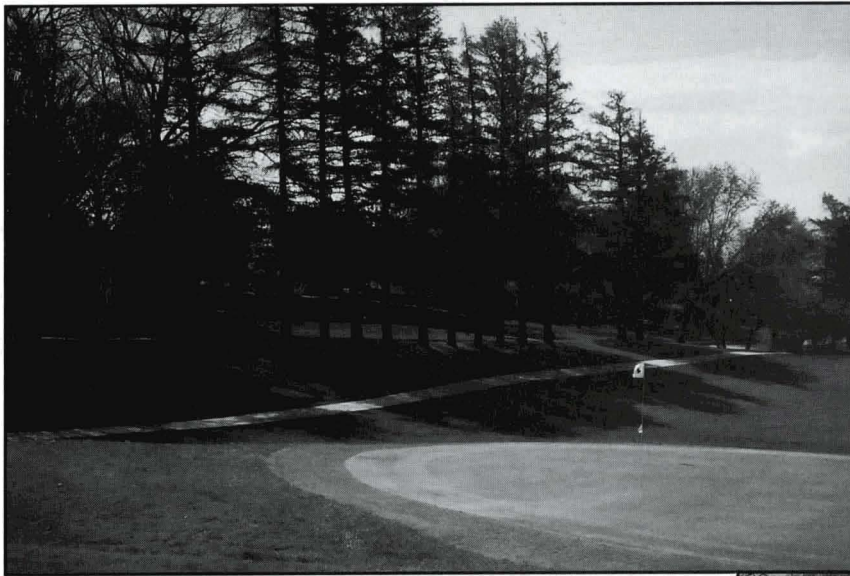
The Newton Larch Grove

Nominated by: Hans J Brosig, Jasper County Historical Society

A grove of larch trees at the Newton Country Club was planted in the 1880s by John and Joseph Woodrow. Both men came to Newton in 1865. Joseph started a nursery which he operated from 1869 to 1883. Then he became interested in banking and was named president of the Jasper County Savings Bank in 1889.

John purchased 40 acres of land just outside of Newton's city limits and began farming, adding more land as time passed. Together John and Joseph planted a row of larch trees along the east end of John's 40 acres. They chose larch because they grow fast and tall. In 1915, John sold his farm to the Newton Country Club. The larch trees still stand along the east end of the golf course on West 12th Street.

The Woodrow brothers had descendants that became founders of the Automatic Washing Machine Company and the Woodrow Washing Machine Company.



The Pear Tree

Nominated by: Wayne Moore, Henry County Historic Preservation Commission

There is a pear tree along the north side of the road on the Henry/Lee County line just east of Highway X23. The tree was planted in the 1840s by James Box. It was supposedly brought from Ohio as a seedling and planted in what was then a large orchard. In 1960, the tree was declared a historical site being the oldest living fruit tree in Iowa still bearing.

The tree is approximately 150 years old and measures eleven feet in circumference at the base. The condition of the tree is very poor, being held together by metal bands to keep a split from becoming worse.



The Plow In The Oak Tree

Sometimes an ordinary moment can become a significant event in history, so goes the story of the “plow in the oak”. An unidentified Iowa farmer was plowing in his fields. Music and marching Union soldiers from Iowa passed by on their way to do battle in the Civil War during the early 1860s. Like many Iowans, the farmer felt patriotic and supported the cause of freedom. He unhitched his mules, leaned his plow against a small bur oak in a grove near his fields and joined the Union Forces. He never returned. Over time, the bur oak gradually grew around the plow still waiting for its owner to return from battle. Today, only the handles and part of the plow blade are visible, just as the farmer left it more than 130 years ago.

Two miles south of the community of Exira, Iowa along U.S. Highway 71 is a small county park, known as the “Plow in the Oak” Park. In the far southeast corner of a grove of native bur oaks, more than 150 years old, lies the Plow in the Oak. The tree looks rather ordinary until you think of how it symbolizes the faith of the farmer and of a young state who cared about the freedom of others and the preservation of the Union.



Terrace Hill

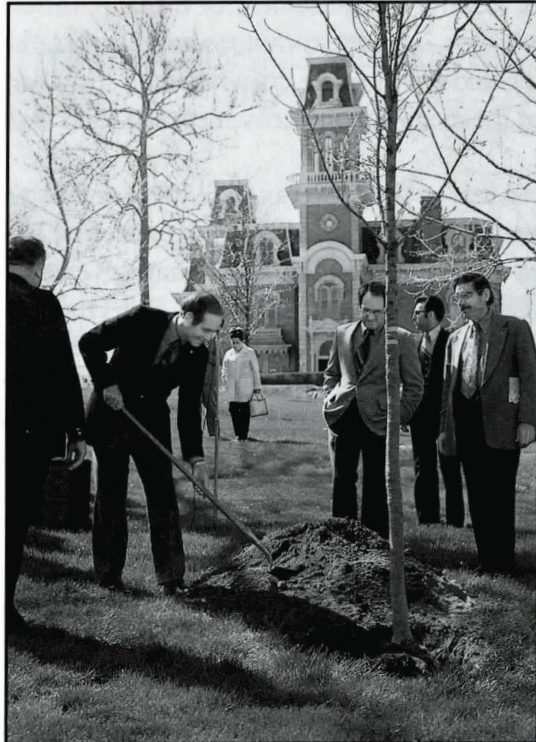
Nominated by: Barbara Filer, Terrace Hill Commission

Terrace Hill, the home of Iowa's governor, was originally owned and developed by one of Iowa's earliest entrepreneurs, B.F. Allen.

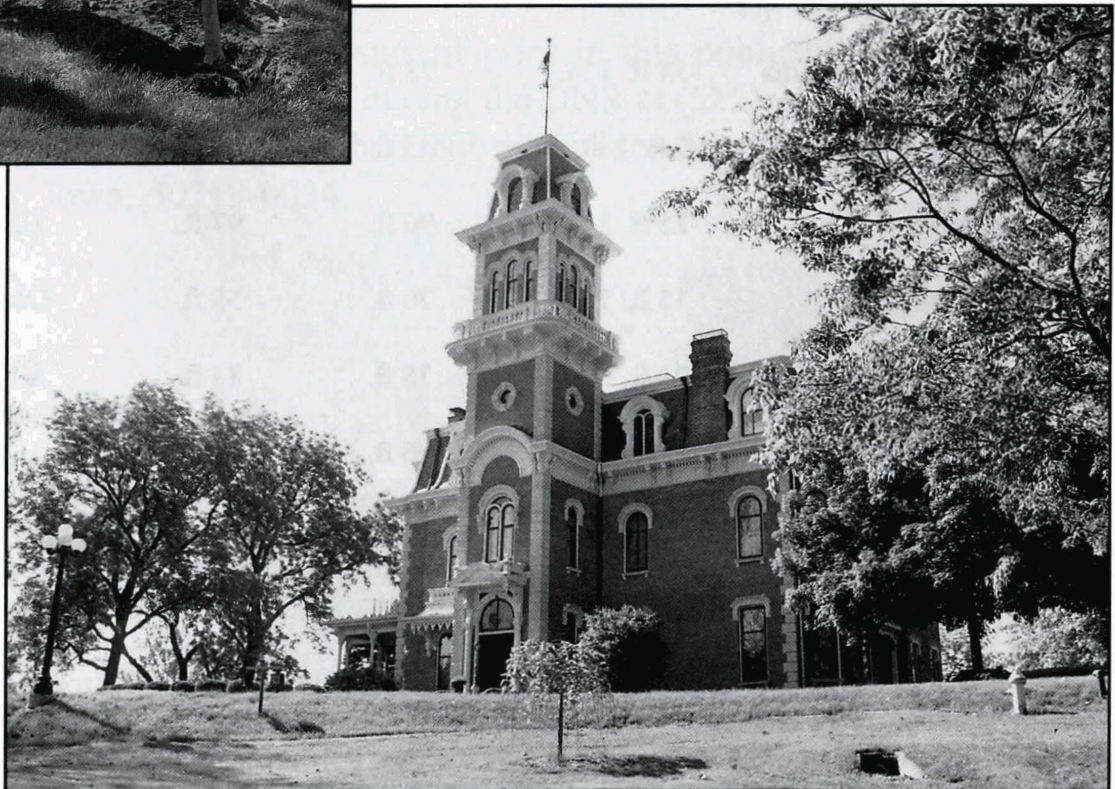
The property was sold to F. M. Hubbell in 1888. An early influence in Des Moines, he made significant contributions to the development and growth of the city. The mansion and grounds became the home of Iowa's chief executive in 1972.

Many of the trees on the property are more than 50 years old. Some of the new trees have been planted by Governor Branstad and his family.

The landscape at Terrace Hill is in the process of a historic re-creation. The design is being created by a landscape architect, who is using research and old photographs to allow the re-creation to be historically accurate. Included in the re-creation is an annual tree replacement program. To date, more than 200 trees and shrubs have been planted on the grounds.



Left - Spring planting at Terrace Hill



Iowa's National Champion "Big Trees"

In 1940, the American Forestry Association (now known as American Forests) began a search and listing of America's largest specimens of trees, calling it the "Big Tree" Program. The "Big Tree" contest as it is commonly called, not only identifies big trees on public areas, but also those on private lands. It is therefore completely voluntary to participate and requires landowner permission to examine and measure the trees in question. Since the beginning of the contest, more than 750 different tree species in all 50 states have been measured and confirmed the largest of their kind in the United States and placed on the National Register of Big Trees.

"Big Trees" are determined on a uniform point system through measurement of tree circumference at 4½ feet above the ground to the nearest inch, (1 inch worth 1 point), total tree height from the ground to tree top to the nearest foot (1 point for every 1 foot), and the average crown spread from one end of the tree's branches to the other side of the tree (¼ point for every foot of crown spread) and then totaled.

Although much of Iowa's original forest cover has been lost to the plow, ax, bulldozer and chain saw, seven trees in our state have been at one time or another placed on the National Register of Big Trees thanks to volunteers and a "Big Tree" contest search in 1978 between the Des Moines Register, Iowa State University Forestry Department and the Forestry Division. Today, three Iowa Big Trees are National Champions: the European Black Alder of Davenport, the Cucumber Magnolia of Waukon and the Silver Maple of West Des Moines. Of the three National Big Tree Champions, only the Silver Maple is native, with the Alder and Magnolia suggesting that the trees were brought and planted here by early Iowans. Below is a listing of the Iowa National Big Tree Champions of the past and present with their dimensions and general locations.

Common Name/Location	Circumference	Height	Spread	Status
Eastern Cottonwood/Tama	34 ft. 1 in.	78 ft.	126 ft.	Blown Down
Russian Olive/Amana	7 ft. 1 in.	45 ft.	65 ft.	Blown Down
White Poplar/Onawa	25 ft. 3 in.	90 ft.	97 ft.	Blown Down
Scotch Pine/Nevada	15 ft. 7 in.	70 ft.	58 ft.	Dead
Cucumber Magnolia/Waukon	24 ft. 5 in.	75 ft.	83 ft.	Alive at the Samaritan Home
E. Black Alder/Davenport	8 ft. 9 in.	76 ft.	41 ft.	Alive at Vander Veer City Park
Silver Maple/W. Des Moines	28 ft.	73 ft.	84 ft.	Alive on the Brown Farm

Iowa has its own list of State "Big Tree" Champions, 115 tree species strong. For information on how to nominate a Big Tree or for an up-to-date listing of Iowa's Big Tree Champions, write or call the Forestry Division of the Iowa Department of Natural Resources, Wallace State Office Building, Des Moines, Iowa 50319-0034, (515) 242-5966.

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